

AMENDMENTS TO THE CLAIMS

1-3. (Canceled)

4. (Currently Amended) ~~The communication system of claim 3, wherein said distortion minimization circuitry further comprises~~ A communication system comprising:
a radio module operable to generate an RF signal at a predetermined frequency;
and
a directional coupler operably coupled to said radio module to measure the power of said RF signal, said directional coupler further comprising:
an envelope detector comprising a detector diode and a capacitor;
and
distortion minimization circuitry operable to minimize distortion generated by said envelope detector at frequencies corresponding to said predetermined frequency and harmonics thereof, said distortion minimization circuitry comprising a first capacitor coupled to said diode, said first capacitor having a capacitance value for minimizing distortion in the frequency band corresponding to the fundamental frequency of said RF signal, and a second capacitor ~~connected~~ coupled to said diode, said second capacitor having a capacitance value for minimizing distortion in the frequency band corresponding to the second harmonic of said fundamental frequency of said RF signal.

5. (Currently Amended) The communication system of claim 4, wherein said distortion minimization circuitry further comprises a third capacitor ~~connected~~ coupled to said diode, said third capacitor having a capacitance value for minimizing distortion in the frequency band corresponding to the third harmonic of said fundamental frequency of said RF signal.

6. (Original) The communication system of claim 5, wherein said first RF signal has a fundamental frequency in the 2.4 GHz band.

7-9. (Canceled)

10. (Currently Amended) A method of measuring the transmitted power of an RF signal, comprising:

generating an RF signal at a predetermined frequency;

measuring the transmitted power of said RF signal using a directional coupler

having an envelope detector comprising a detector diode and a capacitor;

and

minimizing distortion generated by said envelope detector at frequencies

corresponding to said predetermined frequency and harmonics thereof by

coupling first and second capacitors to said diode, said first capacitor

having a capacitance value for minimizing distortion in the frequency

band corresponding to the fundamental frequency of said RF signal ~~The~~

~~method of claim 9, wherein said distortion is minimized by connecting a~~

~~second capacitor to said diode, said second capacitor having a capacitance~~

~~value for minimizing distortion in the frequency band corresponding to the~~

~~second harmonic of said fundamental frequency of said RF signal.~~

11. (Currently Amended) The method of claim 10, wherein said distortion is minimized by ~~connecting~~ coupling a third capacitor to said diode, said third capacitor having a capacitance value for minimizing distortion in the frequency band corresponding to the third harmonic of said fundamental frequency of said RF signal.

12. (Original) The method of claim 11, wherein said first RF signal has a fundamental frequency in the 2.4 GHz band.

13-15. (Canceled)

16. (Original) ~~The communication system of claim 15, wherein said distortion minimization circuitry further comprises~~ An integrated circuit for enabling data communication between a host device and at least one wirelessly enabled external device, comprising:

a host interface;

a radio module operably coupled to said host interface, wherein said radio module is operable to generate an RF signal at a predetermined frequency; and
a directional coupler operably coupled to said radio module to measure the power of said RF signal, said directional coupler further comprising:

an envelope detector comprising a detector diode and a capacitor;

and

distortion minimization circuitry operable to minimize distortion generated by said envelope detector at frequencies corresponding to said predetermined frequency and harmonics thereof, said distortion minimization circuitry comprising a first capacitor coupled to said diode, said first capacitor having a capacitance value for minimizing distortion in the frequency band corresponding to the fundamental frequency of said RF signal, and a second capacitor ~~connected~~ coupled to said diode, said second capacitor having a capacitance value for minimizing distortion in the frequency band corresponding to the second harmonic of said fundamental frequency of said RF signal.

17. (Currently Amended) The communication system of claim 16, wherein said distortion minimization circuitry further comprises a third capacitor ~~connected~~ coupled to said diode, said third capacitor having a capacitance value for minimizing distortion in the frequency band corresponding to the third harmonic of said fundamental frequency of said RF signal.

18. (Original) The communication system of claim 17, wherein said first RF signal has a fundamental frequency in the 2.4 GHz band.